Four Replacement Auto-Passenger Ferries

Our promise to the public

The Washington State Department of Transportation (WSDOT) is committed to maintaining the existing capacity of the Ferry System and meeting growth in the public's demand for ferry service.

What is WSDOT doing to maintain and increase vessel carrying capacity?

WSDOT proposes to build four new auto-passenger ferries to replace five aging vessels in the fleet. To start work on this project, WSF requires $4,128,000 in the 2001-2003 Biennium. These funds will be used for a feasibility study of the kind of vessel that is needed, development of an outline of construction specifications, and initiation of an RFP process based on the procurement-partnership approach. Total cost of building the four vessels is estimated to be $322 million. The last of the four new vessels will be delivered in FY 2009.

Why is WSDOT investing in the replacement of auto-passenger ferries?

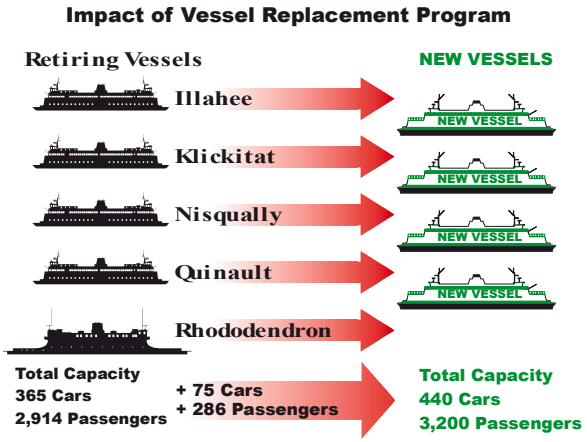
WSF uses two strategies for preserving vessels in its fleet. The first strategy replaces the components of a vessel as they reach the end of their life cycles. The second strategy is to replace the vessel with a new vessel of equivalent or greater capacity to carry people and vehicles.

Two factors influence when WSF shifts its investment strategy from replacing vessel components to replacing the entire vessel. First, as a vessel grows older it becomes more expensive to replace components. For example, after 60 years, WSF may not be able to obtain propulsion systems similar to the existing systems. Installing new-generation systems may require replacement of a host of other systems in order to obtain compatibility. Further, increased weight of the new systems may require significant structural modification of the vessel. In other words, it may not be economically feasible to preserve the vessel. Second, the vessel may no longer be functionally suited for meeting Ferry System service requirements. A vessel's functionality is most often associated with its speed, physical dimensions and capacity. Economic and functional considerations determine the service life of a vessel.

WSDOT needs to replace five vessels. Four Steel Electric Class vessels were built in 1927 and are 74 years old. The MV Rhododendron was built in 1947. Because of the advanced age of these vessels substantial investments are required to keep them in sound operating condition. For example, these vessels have riveted rather than welded hulls. As a result, preserving hull integrity is very expensive. The value of these vessels is further reduced by functional obsolescence. All five vessels have pre-World War II car deck design with narrow lanes. Also, their capacity will be reduced in response to new regulations requiring installation of marine evacuation systems. As a result, these vessels are no longer suited for current and projected service requirements.

The end result

The construction of these four new vessels will more than offset the retirement of the five vessels scheduled to occur between 2008 and 2010. Each replacement vessel will carry 110 cars and 800 passengers. This compares to the four retiring Steel Electric Class vessels that carry 75 cars and 592 passengers each and the MV Rhododendron that carries 65 cars and 546 passengers. The net change in fleet capacity is +75 car spaces and +286 passenger spaces. As a result WSDOT will be able to maintain existing service and add carrying capacity to the fleet.



What are the project timelines?

Preconstruction activities will begin in July 2002. Construction will start in November 2004. The shipyard will deliver the four vessels to WSF in succession in February 2007, October 2007, May 2008 and December 2008. The table below summarizes the project schedule and expenditures per biennium.

What is being done to protect the environment?

Replacement of older ferries with new state-of-the-art vessels reduces the risk of damage to the environment caused by failure of vessel systems and structures, such as on-board sewage systems and oily water separators.

Increasing safety is one of our priorities

Replacement of older ferries with new state-of-the-art vessels reduces the risk of injury to persons caused by failure of vessel systems and structures.

Government-to-government tribal consultative process

This process is not applicable because the project does not impact tribal lands.

Financial information

This project is currently unfunded and cannot be undertaken until new sources of revenue are created.

How can I get more information?

For more information contact:

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Washington State Ferries ConstructionProgram (W)

Four Maneuverable Class Ferries (110-Car Capacity)

Procurement Partnership Process, Starting July 2002

(In Millions of Dollars Inflated to the Year of Expenditure)

Program W Detail By Project Phases	Schedule	01-03	03-05	05-07	07-09	Total Cost In Inflated Dollars
Preliminary Engineering	**JUL 02--OCT 04**	**4.128**	**4.161**	**-**	**-**	**8.289**
Prephase (Feasibility & Outline Specs)	JUL 02--FEB 03	2.993	-	-	-	2.993
Phase I (Notice, RFP, Evaluation & Selection)	MAR 03--JUN 03	1.135	-	-	-	1.135
Phase II (Tech Proposals, Estimates, Selection)	JUL 03--OCT 04	-	4.161	-	-	4.161
1st Vessel Cost	**NOV 04--FEB 07**	**-**	**11.677**	**77.726**	**-**	**89.404**
Shipyard Detailed Engineering	NOV 04--JUN 05	-	10.293	-	-	10.293
Deferred Phase II Costs	NOV 04--JUN 05	-	1.385	-	-	1.385
1st Vessel Shipyard Cost	JUL 05--FEB 07	-	-	77.726	-	77.726
2d Vessel Shipyard Costs	**APR 06--OCT 07**	**-**	**-**	**59.655**	**16.520**	**76.175**
3d Vessel Shipyard Costs	**JAN 07--MAY 08**	**-**	**-**	**25.569**	**48.376**	**73.945**
4th Vessel Shipyard Costs	**AUG 07--DEC 08**	**-**	**-**	**-**	**74.077**	**74.077**
Program W Cost By Biennium		4.128	15.838	162.950	138.973	321.889

Note. This budgetary estimate assumes a procurement partnership process resulting in a single contract for four vessels built in succession at the same shipyard.